



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,205	08/01/2003	Roy Greeff	MI40-358	3259
21567	7590	12/08/2005	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			ZIMMERMAN, BRIAN A	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/633,205	GREEFF ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian A. Zimmerman	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14-20 and 35-87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 48-53 and 63-74 is/are allowed.
- 6) ☒ Claim(s) 14-20, 35-43, 45, 46, 54 and 75-87 is/are rejected.
- 7) ☒ Claim(s) 44, 47, 55-62 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **EXAMINER'S RESPONSE**

### **Status of Application**

In response to the applicant's amendment received on 11/21/05. The examiner has considered the new presentation of claims and applicant arguments in view of the disclosure and the present state of the prior art. And it is the examiner's position that claims 14-20,35-43,45,46,54,57-60,62 and 75-87 are unpatentable for the reasons set forth in this office action:

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 79-87 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant fails to comply with MPEP 2163 that states the applicant should specifically point out support for any amendments. Support could not be found for the local continuous wave communicated via wires and the received continuous wave communicated wirelessly. Support could not be found for the received continuous wave being constant frequency and amplitude.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 14-20,35-43,45,46,54,75-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa (5355519) and Baldwin (4075632) and Pidwersky (6046683).

The difference between the invention of the claims and the Hasegawa reference is the use of the phase shifter in an interrogation system. the fading simulator is interpose between the transmitter and the receiver thus suggesting a wired media for acquiring the local CW wave. Using a radio receiver to acquire the received CW wave implies that the media for the received CW wave is wireless.

In an analogous art, Baldwin teaches the use of a phase shifter in the interrogator of a backscatter communication system. See figure 2 and the description of the modulation techniques including col. 5 lines 5+. This permits the use of phase modulation in a transponder interrogation system. It is well held in the art that phase modulation has advantages over amplitude modulation in that low cost linear amplifiers can be used since the amplitude of the modulation signal remains relatively constant.

In an analogous art, Pidwersky shows the use of PSK modulation in a modulated backscatter system. A backscattered PSK modulation signal is a wireless signal of constant frequency and amplitude.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the phase shifter of Hasegawa in the interrogator of Baldwin to permit the use and known advantages of phase modulation in the interrogation system as suggested by Pidwersky.

### ***Response to Arguments***

Applicant's arguments filed 7/11/05 have been fully considered but they are not persuasive.

The applicant recites claim 14 essentially in its entirety, then states the prior art does not teach the above-recited limitations. These arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

The applicant argues that they have searched the Hasegawa reference and failed to uncover the term continuous wave as a signal in Hasegawa. This is completely contrary to the applicant's arguments on page 4 of the 11/16/04 response, where the applicant quotes MPEP 2163.02...the subject matter need not be described using the same terms or haec verba...for the disclosure to be considered teaching the element.

Art Unit: 2635

The Examiner ponders, which is it. The applicant wants the interpretation of their specification to be all reaching when considering the interpretation of their claims, but then only accepts another patent if it uses the exact terms. This is not permitted.

While, it may be true that the exact term(s) (for example: **Continuous Wave**) may not be specifically found in the references, one of ordinary skill in the art is well aware that terms are often creatively used in the art when defining the same or similar elements.

Upon a full reading of the Baldwin reference, it is noted that the unmodulated carrier wave meets the applicant's definition of a continuous wave as set forth in the specification. Furthermore, Hasagawa is cited for teaching using a locally generated wave as an input to a fading simulator to correct errors to due to fading. When combined with Baldwin, the concept would use the locally generated signal of Baldwin, a CW signal as an input to a fading simulator to correct any errors in the received signal do to fading.

The applicant argues that one would not be motivated to combine Baldwin and Hawagawa. Hasagawa is cited for teaching using a locally generated wave as an input to a fading simulator to correct errors to due to fading in a PSK system. Pidwersky teaches the use of PSK in a modulated backscatter system. When combined with Baldwin, the concept would use the locally generated signal of Baldwin, a CW signal as an input to a fading simulator to **correct any errors in the received signal do to fading**. Therefore, correcting errors due to fading is motivation to combine the references.

The applicant requests objective evidence that PSK provides known advantages. Baldwin teaches the use of an amplitude modulated signal in a interrogation system. Lathi, pg 227 confirms what the examiner stated in prior office actions; namely that the use of angle modulation (PSK is an example) reduces the need for linear amplifiers or other linear elements. Furthermore, the newly cited reference (Pidwerdsky) suggests the use of PSK in a backscatter.

The applicant argues that the references do not provide adjusting the received CW signal to provide an adjusted CW signal (claim 35). Hasagawa teaches performing a fading adjustment to the received PSK signal. The combination of Baldwin and Pidwersky teach using PSK in a modulated backscatter system. Therefore, the combination would suggest adjusting the received (modulated) signal to compensate for fading errors.

The applicant argues that the references do not select one of a plurality of phase shift angles and shifting the signal. Baldwin selects from phase shift angles of  $\pm 90$  degrees, thus meeting the selecting one from a plurality. Furthermore, even if the shift angle of Baldwin were fixed for all time, the shift angle was chosen at one time and the Baldwin system operates according to the selected phase shift angle thus meeting the claimed limitation.

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 7/11/05 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE**

**FINAL.** See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian A. Zimmerman whose telephone number is 571-272-3059. The examiner can normally be reached on Off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian A. Zimmerman  
Primary Examiner  
Art Unit 2635

BAZ